Kajian Suhu Pengeringan Teh Daun Beluntas (Pluchea Indica L.) dan Pengaruhnya terhadap Kandungan Antioksidan

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Author Order	3 of 18
Accreditation	
Abstract	This research investigates the impact of drying temperature on the antioxidant content of Beluntas leaf tea (Pluchea indica L.). Beluntas, a widely recognized medicinal herb, is renowned for its potential health benefits attributed to its antioxidant properties. This quantitative study employs a Factorial Completely Randomized Design with two factors: the drying time of Beluntas leaves (factor W) and the drying temperature (factor S). The research aims to evaluate the effects of drying time and temperature of Beluntas leaves on pH, yield, moisture content, antioxidant content, tannin content, and organoleptic properties of Beluntas leaf tea. Drying times of 120, 140, and 160 minutes were used, while drying temperatures were 50, 60, and 70Ã‚Â°C. Beluntas leaf tea was then brewed with 200 ml of hot water at 90-100Ã‚Â°C temperatures and steeped for 10 minutes. The results of the research can be summarized as follows: 1) Drying temperature and time significantly affect pH, yield, moisture content, antioxidant content, and tannin content. Higher drying temperatures and longer drying times decrease, pH, yield, moisture content, antioxidant content, and tannin content. 2) The optimal treatment of drying temperature and time to obtain optimal antioxidant content is in sample S1W2 (drying temperature of 50Ã‚Â°C for 140 minutes) with a moisture content of 7.74%, pH of 5.92, yield of 74.66%, antioxidant content of 59.12%, and tannin content of 14.90%. 3) Based on organoleptic tests, the sample preferred by the panelists is S3W2 (drying temperature of 70Ã‚Â°C for 140 minutes) with a tea color that tends towards greenish-yellow, slightly characteristic aroma of Beluntas, non-bitter taste, and a pleasant aftertaste. The results indicate a significant impact of drying temperature on the antioxidant content of Beluntas leaf tea, with clear trends observed with varying temperatures. Understanding the relationship between drying temperature and antioxidant content is crucial for optimizing the production process of Beluntas leaf tea to maximize its health-promoting properties. This research provides valuable insights into the cultivation and processing of Beluntas as a functional beverage with enhanced antioxidant activity.
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